

**STATEMENT OF BASIS (AI No. 137734)  
PER20060001**

for draft Louisiana Pollutant Discharge Elimination System permit No. **LA0122661** to discharge to waters of the State of Louisiana.

**THE APPLICANT IS:** Amite Sign Company, LLC  
Post Office Box 696  
Amite, Louisiana 70422

**ISSUING OFFICE:** Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313

**PREPARED BY:** Lisa Kemp

**DATE PREPARED:** February 21, 2007

**1. PERMIT STATUS**

**A. Reason For Permit Action:**

First time issuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

**B. NPDES permit -** N/A

**C. LPDES permits -** N/A

**D. Date Application Received:** December 14, 2006; Additional information was received on February 7, 2007 and on February 20, 2007; Revisions to the application were received on February 12, 2007 and February 21, 2007

Note: An LPDES No Exposure Certification For Exclusion From LPDES Storm Water Permitting was submitted with the permit application. However, additional information received in a telephone conversation with the facility representative on February 7, 2007 revealed that the facility does do loading and unloading outside. Therefore, they do not qualify for a No Exposure Certification. Revisions to the application received on February 21, 2007, included a request to withdraw the No Exposure Certification.

**2. FACILITY INFORMATION**

**A. FACILITY TYPE/ACTIVITY -** sign printing facility

Amite Sign Company, LLC is an existing sign printing facility which discharges treated sanitary wastewater and proposes to discharge treated print screen washwater. Signs are produced using the print screen process to print script onto corrugated plastic sheets or fiberboards. The design is transferred using a photo-sensitive gel coated onto a master screen. After the gel is cured, a negative image is produced onto the master screen. The master screen is placed against the print media where the ink is applied and forced through the screen onto the media.

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Once this process is completed, solvent is used to remove the ink and photosensitive gel from the master screen. The screen is sprayed with solvent in a designated containment area. The excess solvent and ink material is collected in a closed containment area and reused (closed loop process). After the solvent has set on the screen and free liquids drain off, the screen is moved to an adjacent containment area where it is pressure washed with water to remove the remaining ink, gel, and solvent residues. Currently, this once-used process washwater is collected in 55-gallon containers. The facility intends to treat this washwater and discharge the effluent upon issuance of an LPDES permit. The facility also discharges treated sanitary wastewater from a mechanical sewage treatment plant which services the main office.

**B. FEE RATE**

1. Fee Rating Facility Type: minor
2. Complexity Type: II\*
3. Wastewater Type: II
4. SIC code: 2759, 7389

\*The points for this facility have been BPJ'd to 2 because of the low volume of wastewater discharged.

**C. LOCATION** - 12687 Virginia Street, in Amite, Tangipahoa Parish  
 Latitude 30° 42' 06" Longitude 90° 30' 37.2"

**3. OUTFALL INFORMATION**

Outfall 001

Discharge Type: master print screen washwater  
 Treatment: proposed treatment - carbon filtration and settling tank  
 Location: at the point of discharge from the treatment system northeast of the main office  
 (Latitude 30° 42' 06" Longitude 90° 30' 37")  
 Flow: 65 gpd  
 Discharge Route: Natalbany River via local drainage

Outfall 002

Discharge Type: treated sanitary wastewater  
 Treatment: mechanical treatment plant  
 Location: at the point of discharge from the sewage treatment plant located west of the main office  
 (Latitude 30° 42' 06" Longitude 90° 30' 37")  
 Flow: 8 employees @ 20gpd/employee = 160 gpd  
 Discharge Route: Natalbany River via local drainage

**4. RECEIVING WATERS**

STREAM - Natalbany River via local drainage

BASIN AND SEGMENT - Lake Pontchartrain Basin, Segment 040503

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- DESIGNATED USES -
- a. primary contact recreation
  - b. secondary contact recreation
  - c. propagation of fish and wildlife

## 5. TMDL STATUS

Subsegment 040503, Natalbany River - Headwaters to Tickfaw River, is listed on LDEQ's Final 2004 303(d) List as impaired for Phosphorus (EPA), pathogen indicators, Organic enrichment/low DO (EPA), and Mercury. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the sign printing facility point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

No photo developing is performed at this facility and Mercury is not used or contained in any of their processes or products used in sign manufacturing. Therefore, the discharges from this facility should not cause or contribute to the violation of water quality standards for this parameter.

Based on an evaluation of the effluent discharges, it was determined that the facility has the potential to discharge pollutants which may contribute to the Phosphorus, organic enrichment/low DO, and pathogen indicators impairments of the receiving waterbody. Therefore, for the purposes of this permit, Phosphorus, organic enrichment/low DO, and pathogen indicators will be addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards.

Standard BOD<sub>5</sub> and COD limits, along with requirements for TOC monitoring and a Stormwater Pollution Prevention Plan have been included in the permit and will adequately address the potential to contribute to the organic enrichment/low DO impairment.

The sanitary discharge is the potential source of Phosphorus from this facility. Due to the small amount of discharge (estimated 160 gpd), this discharge should not cause or contribute to further impairment of the receiving stream. Since increases in Phosphorus input are inversely related to Dissolved Oxygen (through algal growth and decay), the BOD<sub>5</sub> limit should be sufficient to control Phosphorus inputs to the receiving stream.

The discharge of treated sanitary wastewater also has the potential to discharge pollutants which may contribute to the pathogen indicator impairment of the receiving waterbody. This permit includes a Fecal Coliform limit at Outfall 002 to address the pathogen indicator impairment.

## 6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale, Page 7

## 7. COMPLIANCE HISTORY/COMMENTS

- A. WQMD - A file review disclosed that no OES enforcement actions have been issued to Amite Sign Company as of February 21, 2007. According to the application, the facility is taking

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corrective actions to comply with Areas of Concern discovered resulting from an LDEQ Hazardous Waste CEI conducted on March 29, 2006 (see Inspections, below).

B. Inspections –

1. A general inspection for hazardous waste performed at this facility on March 29, 2006 revealed the following:

The Amite Sign Company (ASC) produces signs using the print screen process to print advertisements onto corrugated plastic sheets. Once a master screen has been used for a particular job, the ink is removed so that the screen can be reused. The screen is sprayed with solvent in a small containment area. The excess solvent and ink material is collected in a closed containment area with a sump. The material in the sump is pumped back to the sprayer to be reused. At the time of the inspection, solvent material had spilled outside of the containment area. The material remained inside the building on the concrete floor.

The screen washout area is adjacent to the solvent application area. After the screens have been washed with the solvent and the ink has softened, the screens are pressure washed with water to remove the remaining residues. The resulting rinsate is collected in a 300 gallon tank that is partially buried in the ground. The wastewater discharge is then collected in an earthen trench. At the time of the inspection, a layer of spent solvent was visible on top of the wastewater inside the tank. According to the owner, the solvent layer will eventually evaporate. Additionally, there was evidence that the tank had overfilled since some of the soil around the tank was stained with ink material. ACS failed to determine if the waste material that had spilled out of the tank and the material discharged into the trench system was a hazardous waste as required by LAC33:V.1103.B. The facility has not disposed of any waste. The facility must properly dispose of contaminated soil and properly containerize the water discharge for disposal.

The main office includes one bathroom for approximately 10 employees. The sanitary wastewater is treated using a mechanical treatment plant with a chlorination unit. The facility has not applied for a sanitary wastewater discharge permit.

2. A Follow-up Inspection was conducted on April 21, 2006 to inspect the remediation efforts and to observe confirmatory sampling in the trench system:

The facility collected samples for volatile organic compounds (VOC), semi-volatile compounds, and metals to determine if levels were below RECAP screening standards. The contaminated soil that was removed from the trench system was placed in 55-gallon containers. ASC did not want to profile the material until the results for RECAP were known in case additional soil was required to be removed for disposal. ASC was collecting all wastewater in a 350-gallon tote tank for disposal. ASC had tentatively marked the containers as hazardous waste until they could be properly profiled prior to disposal. ASC intended to collect the wastewater until they could switch over to a solvent recovery system that would not generate wastewater.

3. A letter dated July 9, 2006, was submitted on behalf of Amite Sign Company (ASC) in response to the areas of concern listed on the March 29, 2006 inspection Field Interview Form. The letter revealed that a sampling event was performed on 4/21/06 to determine if any constituents of concern (COC) had contaminated soil in the area identified as the "wastewater trench system." The letter also stated that analytical results indicated that no

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regulatory limits for wastewater and non-wastewater were exceeded for COCs that would make the waste material a hazardous waste. Additionally, the most stringent RECAP Screening Standard for soil protective of groundwater was not exceeded. A request had been made to Pace Analytical Labs to provide results for the acetone and xylenes from the target analyte list.

According to the response, the facility had immediately stopped using the Highflash Ink Wash in the sign manufacture process. Since the time of the referenced inspection, the facility had immediately stopped discharging generated wash water to the trench and had properly containerized and labeled all generated wash water for disposal in accordance with all applicable State and Federal regulations. Soil removed from the trench was containerized and would be disposed of in accordance with all applicable State and Federal regulations. ASC was currently evaluating treatment and/or disposal options for sign manufacturing generated wash water. ASC acknowledged that a LPDES discharge permit would be required for sanitary wastewater generated from the office facilities and noted that an application was in progress.

- C. DMR Review/Excursions – There are no DMR's for this facility, as this is the initial issuance of an LPDES permit.

## **8. ENDANGERED SPECIES**

The receiving waterbody, Subsegment 040503 of the Lake Pontchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Gulf sturgeon, which is listed as an endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Gulf sturgeon. Effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. The more stringent of technology and water quality based limits (as applicable) have been applied to ensure maximum protection of the receiving water.

## **9. HISTORIC SITES**

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

## **10. TENTATIVE DETERMINATION**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

## **11. PUBLIC NOTICES**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written

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comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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### Rationale for Amite Sign Company, LLC

1. **Outfall 001** – master print screen washwater (estimated flow is 65 gallons per day)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow (gpd)	Report: Report	LAC 33:IX.2707.I.1.b
COD	200 : 300	LAG480000
TOC	--- : Report	BPJ
TSS	--- : 45	LAG480000
Oil & Grease	--- : 15	LAG480000
pH – Allowable Range (standard units)	6.0 : 9.0 (min) (max)	LAG480000
Soaps and/or Detergents	Report : ---	LAG480000
<b>ACID COMPOUNDS</b>		
2,4 dimethylphenol	18 : 36 ug/L	(*1), 40 CFR 414.91
<b>BASE/NEUTRAL COMPOUNDS</b>		
Bis (2-ethylhexyl) Phthalate	103 : 279 ug/L	(*1), 40 CFR 414.91
Butylbenzyl Phthalate	69 : 100 ug/L	BPJ, (*2)
Diethyl Phthalate	81 : 203 ug/L	(*1), 40 CFR 414.91

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**Treatment:** proposed treatment - settling tank and carbon filtration

**Monitoring Frequency:** 1/month

**Limits Justification:**

Flow monitoring is based on LAC 33:IX.2707.I.1.b.

COD, TSS, Oil and Grease, and pH limits and Soaps/Detergents reporting are based on the Light Commercial Facilities, LPDES General Permit LAG480000, effective August 1, 2001 – Schedule B.

TOC reporting is included based on BPJ because the facility uses materials containing organic compounds.

All other parameters are included based on BPJ because analytical results submitted with the application indicated a potential for this facility to discharge these acid and base/neutral compounds.

In accordance with LAC 33:IX.1113.B, "Water color shall not be increased to the extent that it will interfere with present usage or projected future use of the state's waterbodies", a narrative

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requirement for Color has been included in the permit because the facility uses ink materials in the sign printing process.

- (\*1) Based on BPJ using 40 CFR Part 414 Organic Chemicals, Plastics, and Synthetic Fibers category; Subpart I and similarly permitted facilities.
- (\*2) Butylbenzyl phthalate limits are based on BPJ using state empirical limitations. Limitations are consistent with current LDEQ practices for permitting facilities with the potential to discharge this type of pollutant.

BPJ Best Professional Judgement

2. **Outfall 002** – treated sanitary wastewater (estimated flow is 160 gallons per day)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Weekly Average (mg/l)	<u>Reference</u>
Flow	--- : Report	LAG530000
BOD <sub>5</sub>	--- : 45	LAG530000
TSS	--- : 45	LAG530000
Fecal Coliform (colonies/100 ml)	--- : 400	LAG530000
pH Allowable Range (Standard Units)	6.0 : 9.0 (min) (max)	LAG530000

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**Treatment:** mechanical treatment plant

**Monitoring Frequency:** 1/ 6 months

**Limits Justification:** Limits are based on the Class I Sanitary Discharge General Permit – LAG530000

BPJ Best Professional Judgement

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

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### **STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT**

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water shall not be required to obtain and LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 2759 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in the storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).